III Understanding Nantucket's Architectural Heritage

Development of the Town of Nantucket

Nantucket, which means "land far out to sea", is a name given by the aboriginal people of the island. When English colonists arrived in 1659 to settle the island it was inhabited by 700-1,000 Wampanoag Indians, a branch of the Algonquin tribe that flourished on Cape Cod and distinguished itself by meeting the Pilgrims when they landed at Plymouth. The Indians on Nantucket lived in six wigwam villages, four located at the eastern edge of the island and one each at Shawkemo and Miacomet. By the 1800s only a few natives remained, their people destroyed by the diseases, rum and domination of the whites. The two main legacies left by the Indians were teaching the colonists to sight and hunt whales offshore and their rhythmic place names, such as Madaket and Sesachacha.

The original English settlement, on land purchased from the Indians, was Sherburne, established in 1661 by the selection of house sites to the west of what is now Nantucket town in a spread pattern stretching south from Capaum Harbor to Hummock Pond (fig. 11). The allocation of land originally and thereafter was made equally among the 27-share Proprietary, which was created to own and govern the island. It included the first 20 purchasers and a half share each for 14 craftsmen asked to join the settlement. The Proprietary was an exclusive, closed group that ruled the island in a somewhat feudal manner. Because the land was for the most part poor for farming, the

No. 39 Holland

No. 37 Charles F. Hussey
"India House"

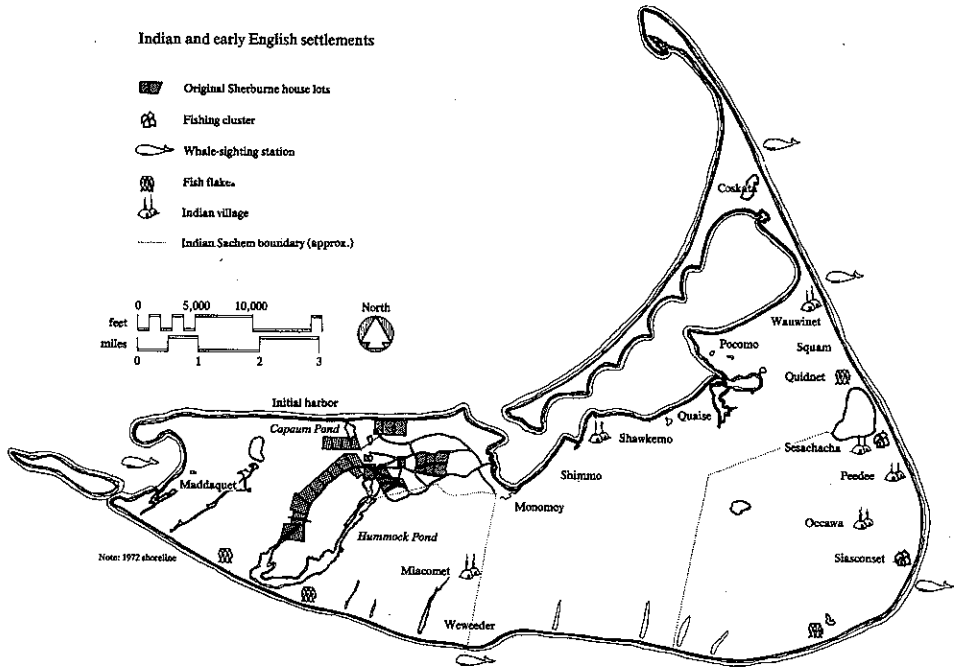


Figure 11: Original island settlement.

moors outside the homesites were kept in common ownership for sheep grazing.

The community gradually turned to the sea for its livelihood. In 1678 the development of the present town was initiated with the division of the Wescoe Acre Lots near the large natural, shoal-sheltered Nantucket Harbor. The 20 long narrow lots, now north of Liberty and west of Federal Streets, were divided among 20 of the 27 Proprietor shares; the remaining seven received land elsewhere. These lots were probably used as rundals (ploughed agricultural strips) in the English tradition.

The major impetus for the removal of the settlement to its present location was the rise of the seafaring whaling industry. In 1716, a wharf was built in the Great Harbor, indicating interest in exploiting the new harborside location. Moreover, the following year Capaum Harbor was closed by sands washed up by several storms, thereby creating Capaum Pond. Accordingly, in 1717 the Fish Lots were divided, running south from Main Street as far as Lyon Street and east from Pine Street to the crest of Quanaty Bank, above the water's edge and where Union Street is today. The 27 lots, one for each Proprietor share, were eventually used to build residences.

As a result of these events, in 1720 Sherburne was officially relocated at Nantucket Harbor. Due to the scarcity of lumber on the island and the substantial quality of the early settlers' houses, many of these original houses were dismantled and re-erected or re-used in the new town. This unique aspect of Nantucket construction, which has continued throughout its history, accounts for the preservation of many very old houses and the maintenance of traditional building methods.

In the early 1700s, the island whalers had begun setting out to sea to hunt the lucrative sperm whale. This shift in the island's economy would sustain the community for almost 150 years, bringing it wealth and growth. In 1723 the first Straight Wharf was built, from which Nantucket sailors could launch their whaling ships. This same year small warehouse lots were divided near the harbor and immediately occupied for business.

Two more residential districts were created in 1726 to provide for the community's growth. The first, the West Monomoy lots, located south of the Fish Lots, comprised 27 long and narrow lots. At this time Orange Street was extended through the Fish Lots parallel to Fair Street and through West Monomoy. Transverse lanes were then laid out west from Orange Street to

create the first area of village character in Nantucket. The other subdivision, South Monomoy, was adjacent to the Creeks but remained undeveloped meadowland because of its low elevation and distance from the town.

The pattern of the town's development was strongly determined by the division of these three major blocks of land among the Proprietor shares. These areas reveal the practical considerations of the island's governing body. In general, each division of land in the town (and elsewhere) created 27 lots, all equal in dimensions and area. Further, within each division the shape and size of the chosen standardized lot was based on what was most suitable for the Proprietors' intended purposes. In the town, the most favorable and level lands were divided first into these specialized grids, with only minor variations made in response to ground contour and natural features (e.g., the bend in Pleasant, Fair and Orange Streets). The degree of order present in this system was atypical of other New England fishing towns, but was necessary here to create 27 equal shares. The irregular, undeeded areas left between these grids and major roads were sold and infilled only later when there was a demand for their use. This process accounts for a town pattern of interesting variety that also contains highly regular areas (fig. 12).

By the mid-1700s Nantucket had assumed most of its basic organization and layout. The town had developed a bustling harbor area, with several piers and quays reaching far into the harbor and a maritime 'hard', or boat, beach. In 1744 commercial expansion necessitated the leveling and division of the hilly beach area between the waterfront area and the rest of the settlement along Lower Main Street. Also indicative of the town's growth was the construction after 1746 of four windmills on nearby hills. These tall landmarks were an important part of the town's image when seen from the harbor or from farther out to sea.

Within the subdivided central areas of the town and along the roads connecting them, simple houses were built to accommodate the rapid growth of the community (increasing between 1764 and 1774 from a population of 3,200 to more than 4,500—up 40 percent in 10 years). At first houses followed the custom of facing south, but as the settlement grew they were built with their main facades abutting the street and with narrow side yards in the tradition of the English town. Conformity of building placement accompanied that of house design. The com-

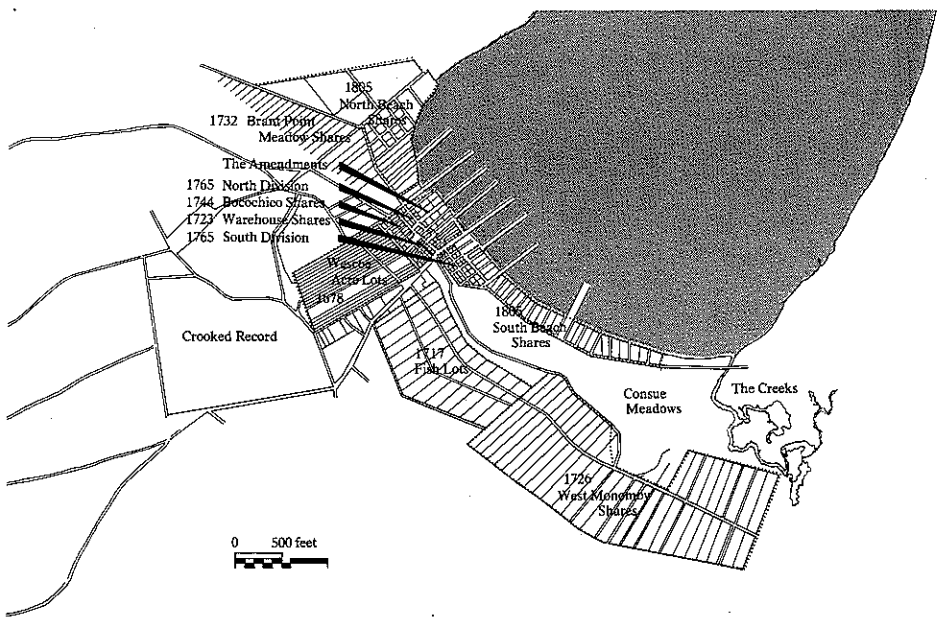


Figure 12: Town lot pattern.

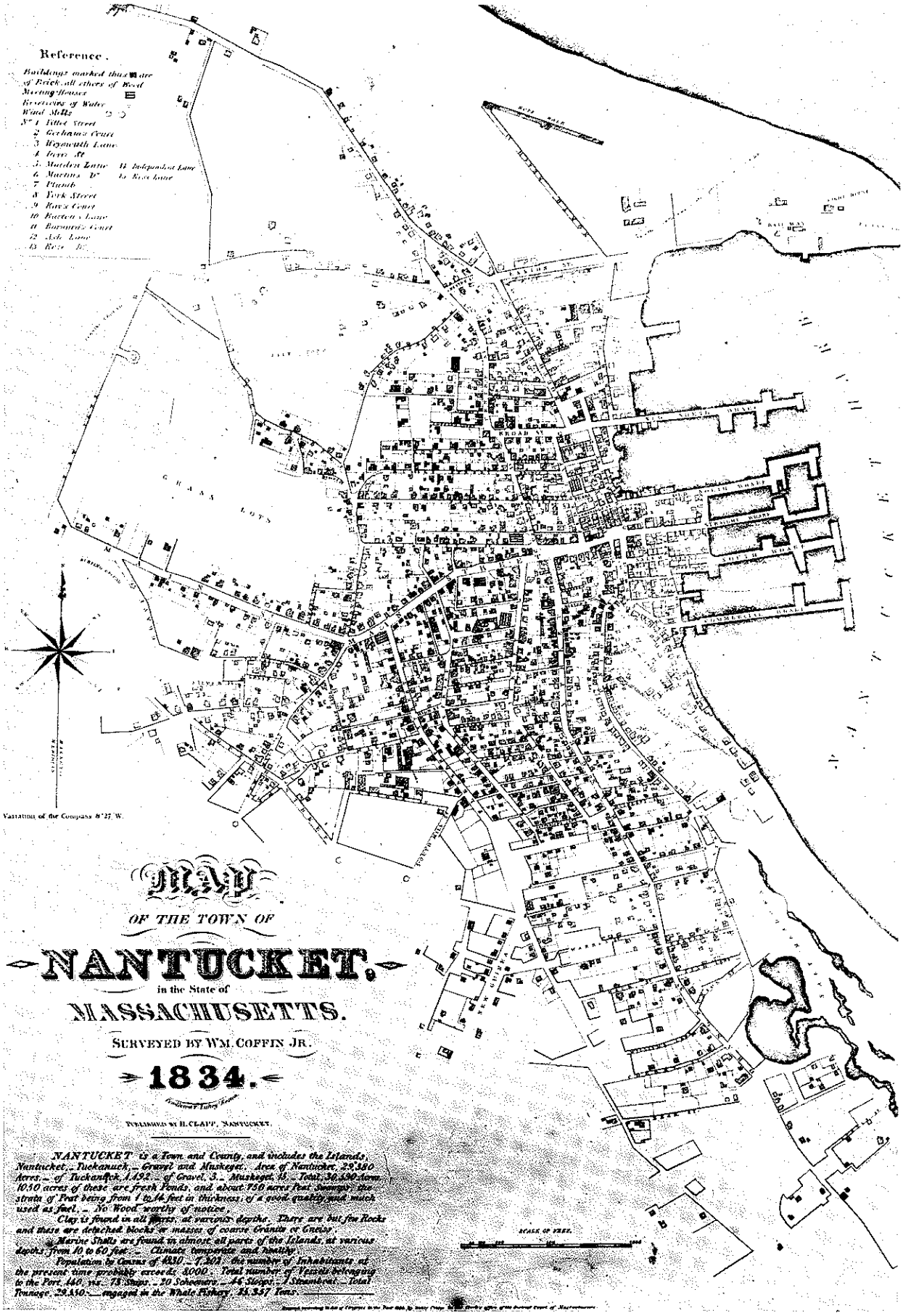


Figure 13: The William Coffin map, 1834

pactness of the town was practical because of: (1) the need for shelter from the wind in a treeless setting, (2) an almost complete dependency on and orientation of the community to the harbor area, and (3) the need for emergency aid among families in a community that sent most of its able-bodied men to sea for long periods of time. As a result, the original lots were divided into many smaller parcels with cross streets and alleys. With the infill of the empty lots, Nantucket assumed its dense, pedestrian-scale character.

The continual prospering of the whaling economy and associated industries—candlemakers, coopers, ship chandlers and builders—maintained Nantucket's growth except during the Revolution and the War of 1812. These conflicts fell particularly hard on the island's people whose entire livelihood as well as their supplies came from the sea—150 Nantucket ships were taken or lost during the Revolution alone. By 1800, the population of the island had reached 5,600. The exposure to foreign tastes and influences, aided by the decline of the strict Quaker influence that had prevailed during the 18th century, were by this time being reflected in the architecture of new houses. They were larger and more elegant, but maintained for the most part a closeness to the street and to each other.

In 1834, William Coffin, Jr., drew a detailed map of Nantucket that, because it included property lines and building locations, clearly shows the consolidated pattern of the town (fig. 13). One can easily see on the map the extent of the settlement area, with its sharp transition to the surrounding open lands. At the time the map was made, a period of great prosperity and growth, the town's dense population was 8,000. Seventy large ships and 70 smaller ones, most of which were engaged in whaling, were registered in the port.

The map reveals much of the structure and form of the town. The axis of Main Street, originally laid out in 1697 before the town existed, had become the focus of Nantucket, with commercial activities concentrated on the end near the waterfront, many in adapted residential structures. Much of the shoreline had been filled in and the busy wharfs were 120 to 160 feet long. The main road arteries of the town generally ran along the line of the water frontage to the town center. They were not entirely straight, but curved to follow the ground contours. To the northeast of Nantucket was Brant Point, which contained mostly marine-related industries such as shipbuilding yards, the town abattoir, block-long rope walks and at its tip one of a series of wooden lighthouses (the first, erected in 1746, was the second lighthouse in the English colonies).

The wealthy ship owners and captains lived along Main Street and nearby Pleasant, Orange and Fair Streets. Here were built the large elegant Neo-Georgian, Federal and, later, Greek Revival houses that indicated the status of their owners. Most other houses remained plain in the Quaker tradition and small on their narrow lots. To the south, including West Monomoy, was a scattered residential area of low, modest houses for artisans, workers and poorer minority families. Residential growth along the main roads leading from town, especially Cliff Road, expanded slowly.

After the fragmentation of the Society of Friends in the early 19th century, other religious groups became prevalent and the present landmark churches were erected: the Second Congregational Church, or South Tower, at 11 Orange Street in 1809

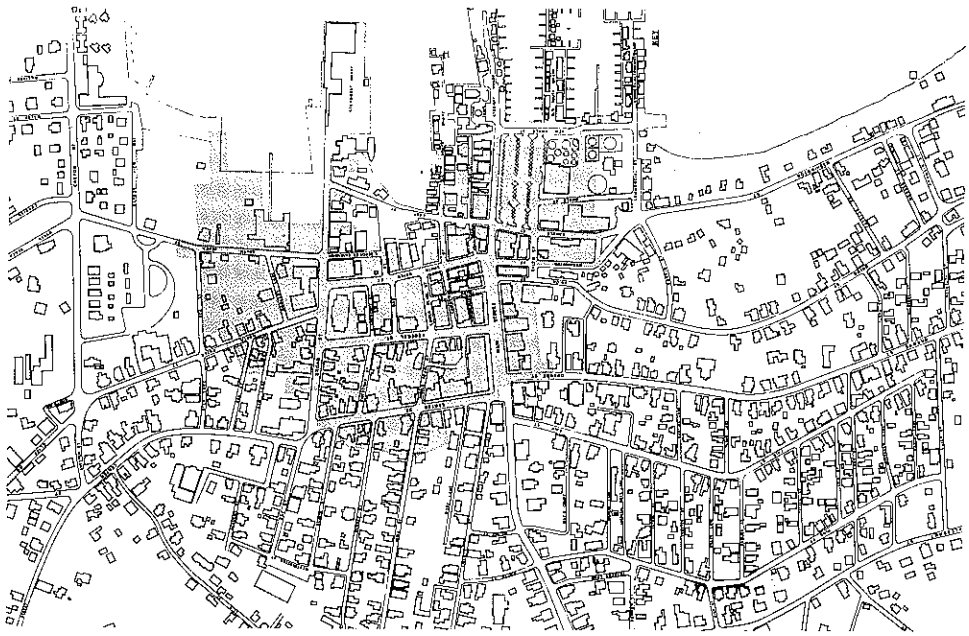


Figure 14. Section of town destroyed by the fire of 1846.

(tower erected in 1830), the First Congregational Church at 62 Centre Street in 1834, the Methodist Church at 2 Centre Street in 1822 (Greek portico added in 1840), and the First Baptist Church at 1 Summer Street in 1840. These are sited quite differently than the large churches of other New England towns, which were usually built on large lots facing an open public common. On Nantucket these large religious structures are hemmed in by smaller residential buildings as part of a compact urban fabric.

The major focus and space of the town, lower Main Street, was terminated at either axis by important commercial buildings rather than by major civic structures: at the south end, the Rotch Market (1775), called the Pacific Club since 1860, originally $2^1/_2$ stories with a gambrel roof; and at the north end, the Pacific National Bank (1818). These aspects of the town's physical development reflect the pragmatic, incremental evolution of the town without an overall aesthetic ideal but with an underlying order based on the varied grid subdivisions.

Nantucket's growth as the capital of a vast ocean empire peaked in 1842: The population was about 10,000, many fine new buildings lined its streets, the harbor held 86 large whaling ships and the economy flourished. The pinnacle was brief, however, as a series of calamities and economic shifts soon after sent Nantucket into rapid decline. In 1846, a rampant fire destroyed the center one-seventh of the town, an area of 36 acres containing more than 400 buildings, and caused more than one million dollars damage (fig. 14). The resilient islanders began rebuilding immediately. Lower Main Street was widened to 90 feet (fig. 15) and two-story brick commercial structures in the Greek Revival style were erected on the north side. The remaining area was rebuilt primarily with frame Greek Revival structures in a more ordered pattern than before. Also important was reconstruction of the Atheneum, one of Nantucket's masterpieces of Greek Revival architecture, facing Pearl Street. Originally a literary society, it now houses a private library serving the island. Earlier, in 1846, the economy had been hurt by the failure of the town's largest bank due to embezzlement. In this year only seven whaling ships fitted out and only three made successful voyages.

On top of these community disasters, the whaling industry collapsed. The shallow harbor mouth continued to shoal up, preventing the entrance of large whaling ships without the expensive use of a floating dry dock called a 'camel'. Ships and businesses moved to better natural harbors on the mainland, such as New Bedford. The 1848 discovery of gold in California

attracted many of the idle whalers, hundreds of whom set sail for the Far West in hopes of riches. Perhaps most importantly, in 1852 an economical process for refining oil to make kerosene was developed and in 1859 oil was discovered in Pennsylvania. With the shift to the petroleum industry for production of lighting fuel, lubricants, soap and other profitable products, whaling was doomed to extinction. In 1896 the last whaling voyage set out from Nantucket's harbor. Even today, the 7,000 person, year-round population of the island is only about 75 percent of its largest population in the 1840s.

Although the economic depression the island endured, lasting until the late 1800s, was a tragedy in terms of community life, it brought the unseen blessing of preserving most of the island's buildings at the height of the town's glory. On the other hand, a great number of other structures were torn down and the materials shipped to the mainland or used locally as firewood. A story passed on by Everett Crosby told of one partnership that, within a decade or so after the Civil War, took down over 250 houses, sending many of them to Cape Cod. In the commercial areas, the once bustling wharfs were stilled.

In the 1870s a hopeful Nantucket again turned to its great resource, the sea, this time to attract vacationers to its sandy shores. Ferry service to the island was increased and advertisements were run on the mainland. Speculative land developments appeared across the island. In 1881 the Nantucket Railroad began service from its terminal on Steamboat Wharf to Surfside. By 1884 it reached to Siasconset. In the same year the huge Nantucket Hotel was assembled on Brant Point, and two years later the

Figure 15. Lower Main Street, c. 1900.

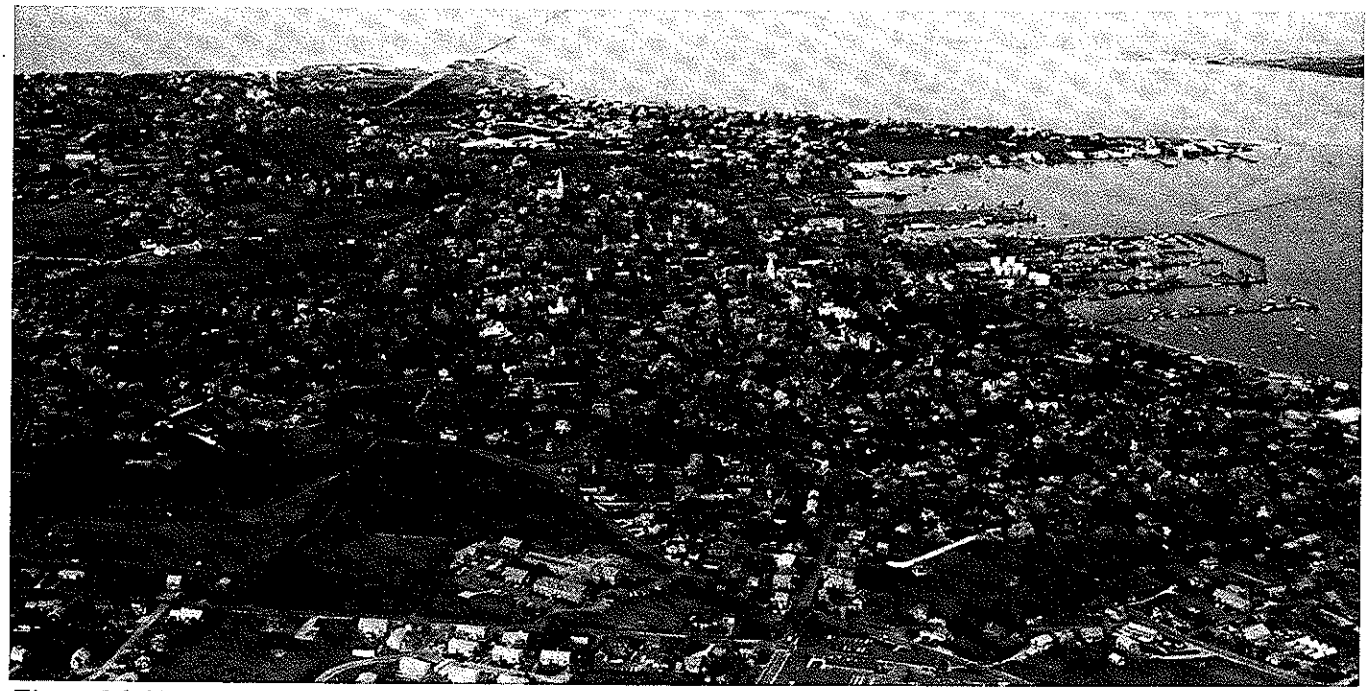


Figure16. Nantucket town pattern, 1991.

Sea Cliff Inn was built along Cliff Road overlooking the Point. Other resort hotels soon followed. Many old houses were either opened for tourist accommodations or bought by off-islanders for summer vacationing. During this period, on empty lots in town, a few houses were built in fanciful bracketed and mansard-roof designs that offer a counterpoint to the overall harmony of the town and hint of the diverse resort designs built elsewhere on the island.

By the 1800s the residential development of the Cliffside and Brant Point areas began to create an addition to the town of a completely different form than had been known before. Large resort houses were built on estate-like lots, oriented to the ocean view with self-contained landscaping. Their highly varied and individual designs included many features of the then popular Stick and Shingle styles. The town population had shrunk to 3,200, so the new construction boosted the local economy.

These resort houses embodied a sense of romanticism not seen in the utilitarian or Classic Revival houses previously built on Nantucket. Today, as relics of a past era of American history, they constitute a rich collection of resort Victoriana in America equalled only in a few other places, such as Bar Harbor. The development of these resort estates continued above and below the Cliff into the second quarter of the 20th century, especially along Cliff Road, Easton Street, Walsh Street and Hulbert Avenue.

The 20th century brought the automobile to Nantucket. Following its introduction in 1900, indignant islanders were so concerned with the growing number of cars and their impact that in 1906 they succeeded in having a state law passed permitting the town to exclude them from the historic settlement from June 15 to September 15. This valiant stand lasted until 1918, when the law was narrowly repealed at a town meeting. Ever since, there has been a conflict in town between the narrow pedestrian streets and the space demands, noise and

exhaust of automobiles, especially during the tourist season. The automobile has had a major impact on Nantucket, for it has generated a scattered expansion of the town pattern while at the same time permitting new development elsewhere on the island.

Since World War II, the town of Nantucket has grown primarily by the construction of houses on its outskirts, many in larger-lot, suburban-grid subdivisions. The once distinct edge of town has been altered in many directions by a gradual lowering of density and road-edge development that clearly is not part of the old pattern. Where once Main Street was the hub of business activity on Nantucket, the island's growing popularity as a resort and the consequent influx of tourists has gradually forced the business life of the island out of town. With only a few exceptions, the core of the old town has been virtually given over to non-necessity retailers. To meet the daily needs of its resident population, a kind of business district has sprung up between the lower ends of Sparks, Pleasant and Orange Streets, with the Finast Plaza, the Nantucket Commons, Sanford Boat Building and many smaller operations emerging in the late 1980s to join the Marine Home Center complex as the center of day-to-day life. The relocation of the fire department and the building of a second post office in this area further defined it as the town-away-from-town. Meanwhile, commercial building began—and continues—to spread out Old South Road between the rotary and the airport.

Remarkable as it is, the town of Nantucket today (fig. 16) is for the most part the same tight, harmonious settlement of pleasant houses that was laid out by the pragmatic Proprietors in the early 1700s and that reached its zenith during the prosperity of the whaling era. It is an unspoiled collection of 17th-20th century buildings unrivaled in the United States for its composite preservation.

Influences on Nantucket Building

There is a spiritual relatedness to the whole of Nantucket architecture. From a common heritage, generations of buildings have come forth remarkable in their family resemblance. The qualities of simplicity and restraint, order and balance, are evident in the vernacular fishing shanty and whale house, the rural farmhouse and barn, the plain but proper house of town streets, the elegant mansion of the Classic Revival, as well as in the more elaborate resort houses of the late 1800s. The common identity of Nantucket houses and other buildings is derived from pervasive influences on the architecture of the island: (1) the climate, (2) the remote island setting, (3) the sea-based livelihood, (4) restricted finances, and (5) the Quaker culture. Only by understanding these determinants and the resultant shared qualities of Nantucket buildings can one sense and appreciate the architectural tradition that new construction joins (fig. 17).

Climate The climate of Nantucket has been a constant determinant of the island's architecture. The summers are cool and humid, with frequent fog. Winters are more mild than on the mainland but cold, with high-velocity, sustained seasonal winds that create a severe chill factor; the annual mean hourly wind speed is 13.4 miles per hour from the southwest.

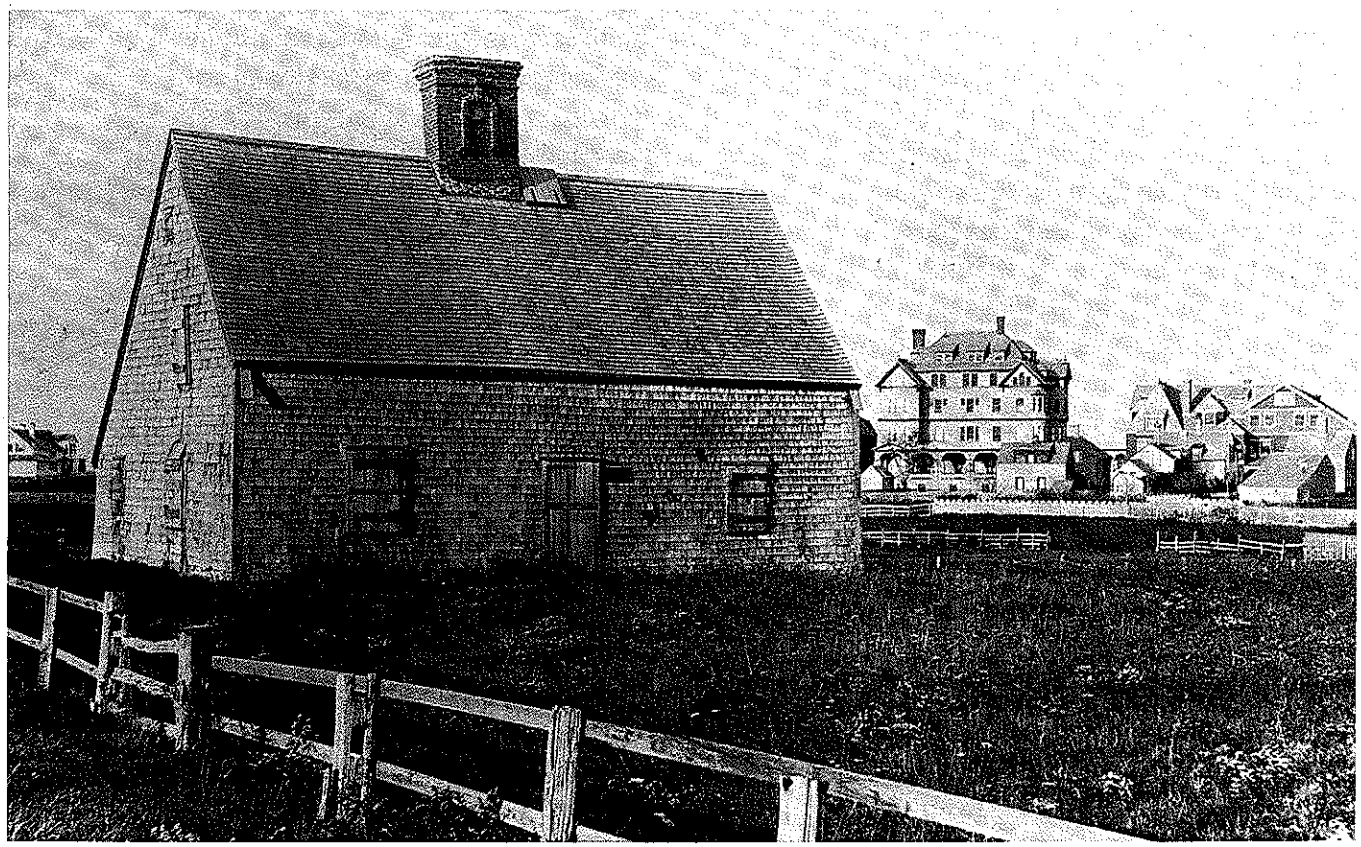


Figure 17. The Jethro Coffin House, with Sea Cliff Inn (demolished) in background — 300 years of Nantucket architecture.

On an island without tall vegetation or deep valleys to provide shelter, buildings had to be tightly sealed. Hence, shingles were used or, similarly, the narrow clapboard. Cornerboards and other trim provided a tight seal against the driving elements. The old buildings were compact, originally pulled close around a central chimney to capture its warmth. The massing of buildings formed by heavy timber structural frames was simple, with no cuts or notches to catch the wind and create extra joints to be sealed. Breezeways were unknown. Elements attached to the plain exteriors were of open design to keep them dry and to let the wind pass. Roofs had little or no overhang because, in addition to wind considerations, one did not need protection from a hot summer sun, while the warmth of the winter sun was precious.

The climate affected not only the siting of individual buildings but the tight town pattern as well. On the almost treeless island, houses were placed close together and along the street, in part to create shelter from the incessant wind.

The Remote Island Setting There was no natural source of building materials on the island, so materials had to be shipped in at considerable cost. Therefore, the use of wood in transportable forms predominated. A Nantucket house, moreover, was seldom destroyed; it was moved or its parts reused as long as they endured. As Melville described it in *Moby Dick*: "Pieces of wood in Nantucket are carried about like bits of the true cross in Rome". Many of the present town's oldest structures were first built at Sherburne, the original settlement of the island, and carried over to Nan-

tucket later. All parts of the house were used again, doors and windows included. This recycling of resources was merely common sense and thrift to islanders. Thus, the lack of easy access to new building materials contributed to adherence to old building methods and traditions on Nantucket. Heavy timber structural frames and the central chimney were used even after similar techniques had disappeared on the mainland.

The remote setting also fostered provincialism and a preference for local ways. Of course, when whaling prospered, its ships brought back precious objects and different ideas from around the world. Although Nantucket was exposed to the Orient and to Europe, change was resisted, nevertheless, especially by the Quakers. New architectural ideas also were more expensive to execute and had to be translated into form mostly by local builders. Because it is a community isolated by the sea, Nantucket has always been conscious of 'outsiders': people and ideas from off-island or 'from around the (Brant) Point'. Even in the late 1800s when Nantucket became a summer resort, the introduced Victorian, Stick and Shingle styles were tempered and flavored by Nantucket values and practicality.

The Sea-based Livelihood The Nantucket people who were initially restricted by the sea eventually turned to it as the lifeblood of the community. Once whaling became the primary industry, almost everyone on the island was connected with the sea in one way or another. The majority of the buildings in town were built by ship's carpenters because there were no professional architects and few master craftsmen. These carpenters knew the balance and symmetry of ships, and they incorporated the tightness and compactness of a sea-worthy vessel into their exposed homes.

Nantucket houses best reveal their indebtedness to the legacy of the sea in their interiors. Until after the 1830s when Classic Revival came into vogue, rooms had low ceilings and were snug, no bigger than necessary, without a bit of wasted space. The early houses of the island were built by hands that crafted and outfitted many ships. Tightness and shipshapeness were paramount. Newel posts, railings and other elements were sturdy and basic, never fancy. Trim had the flat, strong, simple delicacy found in ship cabins.

Restricted Finances The fluctuations of the island economy have been a strong factor in the development of Nantucket architecture. The island suffered great losses of ships and business during the unwanted Revolution of 1776 and the War of 1812, the Second War of Independence. During peace, the whaling industry grew rapidly and progressed through many technical changes in the equipment and preparation needed for voyages to increasingly distant whaling grounds. Most of the capital obtained from successful journeys was needed for reinvestment in the industry. Consequently, most houses of the whaling era remained of moderate size. Their construction was frugal. It was only in times of highest prosperity that wealthy ship owners and captains built their elegant houses, mostly on Main and Orange Streets.

In the end, the economic collapse of the isolated island in the 1850s, when whaling succumbed to the discoveries of oil and gold, was responsible for the unique preservation and integrity of the town today. Only in the late 1800s, when well-to-do people sought out

Figure 18. 18 Pine Street shows Quaker influence on architecture.

unspoiled Nantucket as a summer resort, were numbers of new houses built again. Many of these people did not have restricted funds so they were able to build bigger and more elaborate houses than previously had been constructed on the island.

The Quaker Culture The Religious Society of Friends, as they called themselves, had a pervasive influence on all aspects of Nantucket life. Even though it was not until 50 years after the 1659 white settlement of the island that a Quaker meeting was established, they were the dominant force of the community from 1725 to 1825. It was the Quakers' thrift and tireless industry that boosted the prosperity and development of the growing population. At the height of their influence a few years before 1800 nearly one-half of the 5,600 island residents attended Quaker meetings. The Friends were a disciplined sect, with strong beliefs and strict behavior that affected their every action. As whaling reached around the world and new ideas came to the island, the Quakers became more rigid. By the 1820s, the 'Society' had broken up because of its intolerance as well as massive purges of its followers. Nevertheless, the direct imprint of Quakers on Nantucket architecture had lasted 100 years and their values were carried forth even after that time.

The 'unworldly' Quaker lived a simple life and rejected superficialities of style. Material objects were made to serve a functional purpose, not to create an effect. When they first arrived on the island, the Quakers adopted the integral lean-to of Puritan starkness. They held on to its plain, functional designs even after they had the monetary means and knowledge of popular styles elsewhere to do otherwise. The steadfastness of Quaker principles and traditions is indicated by the story of Job Macy who, in 1790, built a house two stories high front and back at 11 Mill Street. His father argued against this radical departure from the lean-to design and thereafter kept his vow never to enter the structure. Oddly enough, the Quakers eventually adopted this house form as more practical than the lean-to. They infused it with the unadorned functionalism of a central chimney and four-bay facade (four windows wide) containing an off-center door.

After 1825 with the demise of the Quakers and the surge of prosperity through the whaling industry, new styles of classical influence were im-

ported to Nantucket. In spite of their external origins, many of the buildings in these styles reveal the essential Quaker qualities of restraint, simple order and balance, craftsmanship preferred over elaborate detail and a harmony of the parts to the whole. Even in these 'worldly' buildings, one finds the moderation and quiet repose of the Nantucket tradition. Therefore the Quaker influence contributed greatly to the cohesiveness of the town, as well as creating the island's most indigenous and numerous house type (fig. 18).

Figure 19. The Jethro Coffin House, early English.

Styles of Nantucket Architecture

While there is no single appropriate style for the island, as indicated by the diversity of its buildings, understanding the continuity of development and relatedness of the styles described will exemplify the legacy shared by all Nantucket buildings.

Early English (1675-1700) The first houses built by the English settlers were modeled after structures they had left behind. The houses were simple, rectangular, two-storied structures with steep gable roofs. Each floor was only one room deep. The board door opened into an interior entry, or 'porch', containing winder stairs in front of the large internal chimney. Glass was expensive, so glazed windows were kept to a minimum within the shingled walls. Small casement windows of diamond-shaped panes were common. Only four buildings of this type are standing today and all have had additions and renovations. The restored Jethro Coffin House (c.1686) on Sunset Hill is considered by some to be the oldest house remaining on the island. It may have had a two-gabled front when first built (fig. 19).

Lean-to Houses (1700-1760) Lean-to houses were at first created by adding sheds to the rear of English houses, but thereafter the sheds became an integral part of the structure. The essential features of a lean-to, also called a saltbox, were a tall front wall and a lower rear wall resulting from a longer rear slope of the gable roof. The pitch of the front and rear roof planes was about equal. The front wall contained larger windows opening into the most important rooms. To take advantage of the sun's heat, lean-to houses tradi-

Figure 20. Capt. Richard Gardner House, West Chester Street, early lean-to facing south.

tionally faced due south until alignment with the town streets became a more important consideration. Half of Nantucket's historic lean-tos follow this earlier custom of facing south (fig. 20).

The building plan was always organized around a massive central chimney stack serving several fireplaces; above the roof it was commonly articulated and flanged. Many of the early lean-tos were built in a half-house version, with the chimney toward one side to provide for lateral expansion at a later date, such as can be seen at 105 Main Street. In a lean-to the door was aligned with the chimney but window symmetry (fenestration) was not essential. Windows had small-paned, double-hung sashes, commonly 12/12, with protruding pegged frames. Walls and roofs were wood-shingled and exhibited utmost simplicity of design and a complete restraint in decoration.

There are about 80 old lean-tos in the town, about 10 percent of Nantucket's pre-Civil War houses. Three-fifths of the total are $2^1/_2$-story houses and the remainder are smaller $1^3/_4$-story structures. The smaller lean-tos have first-floor areas similar to larger houses, but upstairs they have rooms only in the front (fig. 21). The smaller lean-tos were built during a later period from 1750 to about 1810 and seldom faced south.

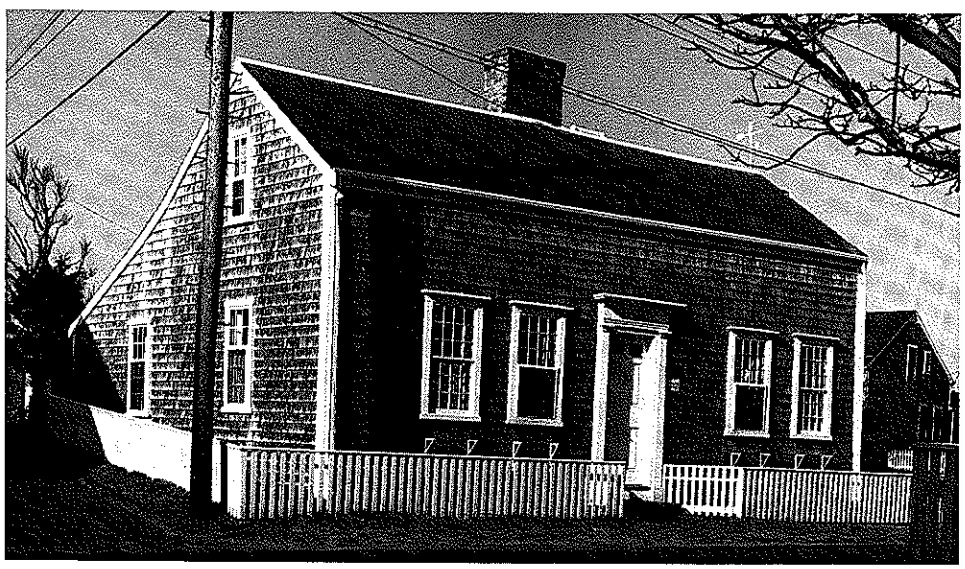


Figure 21. 21 Prospect Street, smaller lean-to.

Gambrel-roof Houses (1740-1800) Only a few gambrel-roof houses, which provide more room in the garret than simple gables, were built in Nantucket. Their design in plan and elevation is generally of the same straightforward character as their contemporaries except for the specialized double-pitched gable roofs (fig. 22).

Typical Nantucket Houses (1760-1830) This house type, indigenous to Nantucket, is a simple Quaker successor to the lean-to, making the rear wall two stories high as well as the front. These compact $2^1/_2$-story blocks with gabled roofs were the predominant building type in town and now constitute about 20 percent of the existing pre-Civil War houses (fig. 23). Moreover, they form the core of the town pattern because of their close siting along the streets. On Nantucket this popular central-chimney house type endured far longer than its mainland colonial counterpart due to local resistance to change, even though it provided only minor flexibility in interior arrangement or exterior design.

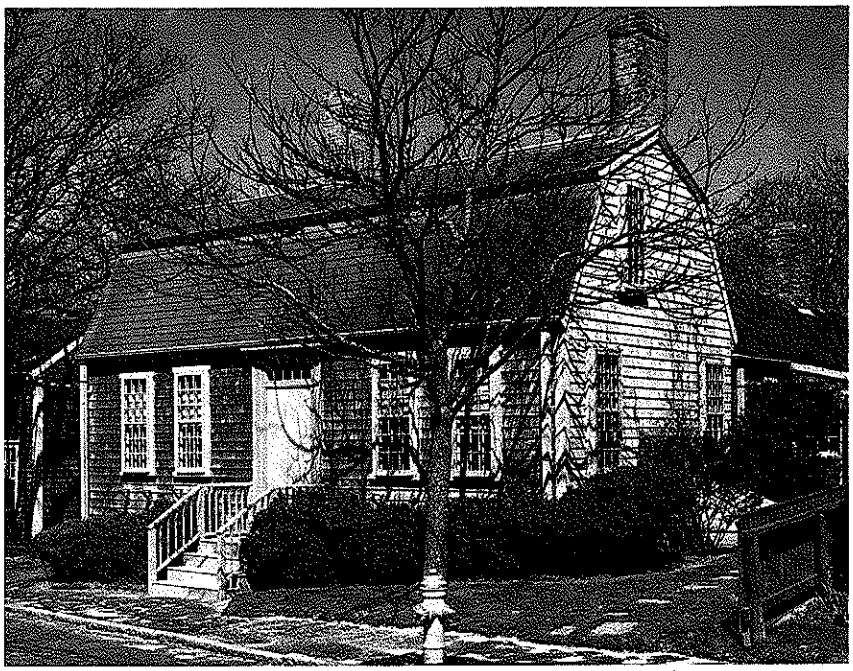


Figure 22. George Gardner House, 8 Pine Street, with gambrel roof.

Although its design was clearly ordered, the inwardly focused, practical typical Nantucket house was indifferent to symmetry in plan or elevation. The four-quadrant interior was wrapped around the massive central chimney. The distinctive four-bay facade had an off-center door, often with a transom above that opened into an entry with stairs and closets. In the original shingled house a pair of 12/12 light double-hung windows was placed to one side of the door and, on the narrow side, typically, a 9/9 window. The four windows of the second story, vertically aligned with those below, were often smaller, 8/12 and 6/9 respectively. Window casings were simple: At first they were only pegged forms but later were built with the refinement, distinctive of Nantucket, of a projecting 5-inch board shelf across the top. In the 1800s even more variations were made in door and window treatment (fig. 24). All roofs were built with an 8- to 9-inch pitch, a roof hatch and, for most, a roof walk. The cornice along the roof was small and plain.

Figure 23. 10 Gardner Street, a typical Nantucket house.

Figure 24. 15 India Street, a typical Nantucket house built in the 1800s.

Late Colonial and Early Federal (1750-1830) As whaling prospered in the latter half of the 18th century and Nantucket merchants were increasingly exposed to New England and other countries, houses became style-conscious. Consideration of the arrangement and ornamentation at the facade, in conjunction with the alteration of the interior plan, resulted in a move away from the typical Quaker house. The nearly 100 existing houses of this later grouping (more than 10 percent of the pre-Civil War houses) represent the slow transition to the Nantucket Federal style. All of these houses are $2^1/_2$ stories.

A necessary change in the house involved a shift of the chimney position. One form adopted on the island exhibited a three-bay facade with the door freed from alignment with the chimney (fig. 25), while another, moving closer to Federal-style symmetry, placed the door in front of a central chimney, permitting a more balanced facade of five bays (fig. 26). Other changes of this period include the use of clapboards instead of shingles, the use (c. 1812) of larger glass panes in 6/6 light windows and the construction of basements raising the house off the ground.

The ornaments that gradually became typical on late colonial and early Federal buildings were derived from English adaptations of ancient Roman architecture, such as door and window moldings, entrance frontispieces with slender pilasters and entablatures and, commonly, sidelights. Later features were doorway fanlights (usually blind), classical porticos, quoins, ornamented cornices and parapets on the roof. Many of the houses that now have Federal elements were originally unadorned and even of different interior plan. The elegant Reuben Bunker House on Academy Hill (1806, remodeled 1820), was originally a typical Nantucket house to which a fifth bay and ornamentation were added (fig. 27). Patriotic motifs, common on the mainland after independence, were not used on the neutral Quaker island.

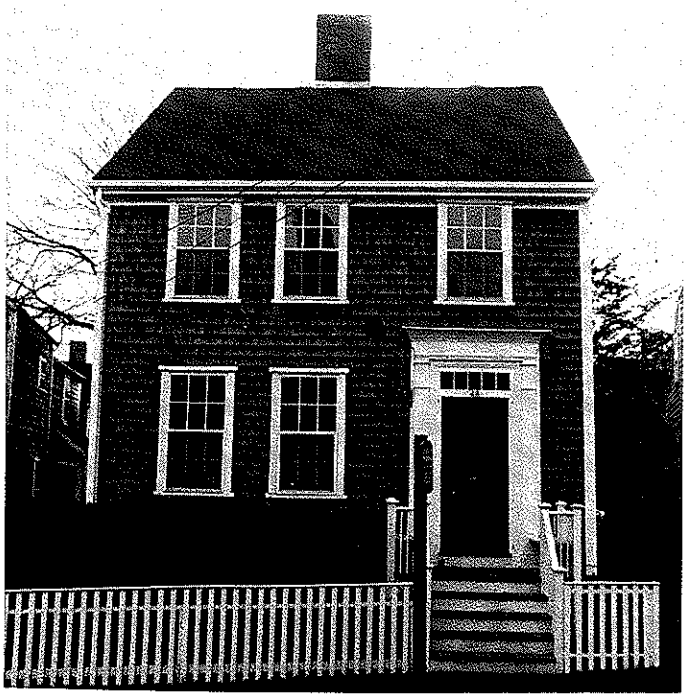


Figure 25. 49 Orange Street, with three-bay facade.

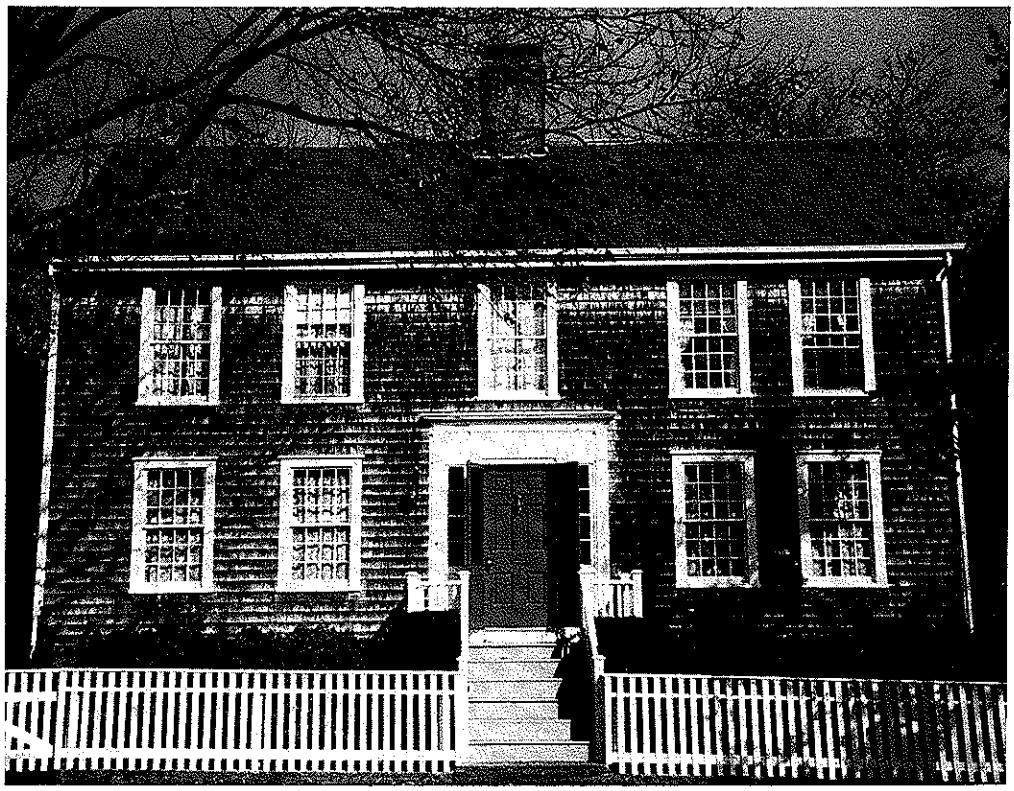


Figure 26. 111 Main Street, with five-bay facade.

Federal (1780-1830) The Federal style refers to the characteristic architecture built after the Revolution and the creation of the American federal government. The elaborated entrance, with sidelights centered in the symmetrical facade of a large box-shaped mass, distinguishes the style. A hip roof, also derived from the Renaissance influence, was used sparingly during the period, such as in the Pacific Bank and the Philip Folger House, 58 Main Street (now flat-roofed). The major innovation of this style on Nantucket was the removal of the chimney from the center of the house and its replacement with an opposing pair of chimneys. This freed the interior plan and circulation of the house, thereby making the transverse stair hall possible. The exterior entrance to the hall then became the organizing feature of the formal five-bay facade as well as the ornamental focus of the house front along the street.

One type of Federal house is identifiable by its twin chimneys, removed from the center of the house but located within the house interior rooms. The accompanying Federal facade organization was combined with characteristic Nantucket simplicity, as is clearly evident at 7 Milk Street (c. 1810) and 117 Main Street (c. 1790), which has a hipped roof (fig. 28). More lavish twin-chimney houses also were built on the island, including one of the most handsome and best proportioned facades in all of Nantucket, the Thomas Macy House at 99 Main Street (fig. 29). An 1830 conversion of an earlier structure, its perfect symmetry features an elegant doorway with an elliptical blind fan under a second-story window with narrow sidelights. Also noteworthy are the deep cornice, the parapet with balustrade insets aligned with the windows below and the distinctive Nantucket railing fence gracefully uniting the door stoop with the street edge.

The further acceptance of Federal-style ideas on the island led to the construction of houses with chimneys built into the gable ends, for example, 34 Orange Street and 82 Main Street. However, they still show a restraint of decoration not found on contemporary structures in America. Near the end of this period, the first brick houses in town were constructed by the wealthy, who alone could afford to have such materials shipped from the mainland, beginning with Moors End

Figure 27. Reuben Bunker House, Academy Hill, with Federal ornamentation.

(1831) at 19 Pleasant Street. The Henry Coffin House (1834) at 75 Main Street also has the formal organization and increased size of a Federal building but displays little ornamentation except for small pilasters about the slightly recessed door, the characteristic Federal parapet with balusters and a roof cupola instead of a roof walk (fig. 30).

In the shadow of these stately homes, more than 100 houses under two stories (most often, $1\frac{3}{4}$-stories) were built incorporating innovations in ornament and plan descending from Federal architecture. Many of these are found in the southern end of town.

Greek Revival (1830-1860) The Greek Revival style emerged in the first quarter of the 19th century in the United States and was adopted with such enthusiasm that it became the young nation's predominant style for several decades. Its popularity was spurred by the admiration for Greek forms over those of Imperial Rome because of the birth of democracy in the ancient Greek city-states and the recent establishment of the Greek republic in the 1820s. Measured drawings of ancient temples were published and subsequently found their way into carpenters' handbooks, making it possible for local builders to follow the simple forms. For a century in its robust youth, eager to throw off the English influence, the strength and boldness of the Greek Revival style was entirely appropriate. Its large-scale elements and monumentality, based on the proportions of the ancient temples, distinguished it from earlier houses employing Roman classical orders (see Appendix E).

Most frame houses built in the Greek Revival style have flat pilasters applied at the building's corners, holding up an entablature. Doorways, likewise, are commonly framed by broad Greek-order pilasters having bases and capitals and supporting a heavy entablature between them. Window frames around the 6/6 double-hung sash were often a small half-

Figure 28. 117 Main Street, a Federal house with hip roof.

round on the sides and a flat-splayed lintel above. Walls were clapboard or, on a few houses, flushboards intended to look like stone. The entire building was raised like a temple, on a high basement, most often windowless in front. On some houses other features of the Greek temples were attached, such as an ornamented parapet along the lower edge of the roof.

The Greek Revival style was quickly adopted for large houses. Their doorways were sheltered by either a projecting portico or recessed entry, reflecting the style's characteristics of larger scale and larger spaces interconnected or interpenetrated (fig. 31). Meanwhile, the Greek Revival style was equally popular in small houses. The applied elements gave them a scale and stature they had never possessed before. Of the almost 200 Greek Revival houses remaining in the town of Nantucket, more than one-half are under two stories in height.

To simulate as closely as possible the original temple form, almost one-half of the Greek Revival houses turned their gable ends toward the street, contrary to the previously accepted convention. The reorientation of the gable was combined with a lowering of the roof pitch and overhang of the raking cornice and entablature to create the triangular pediment of the temple front. On houses under two stories, this restricted the area for full rectangular windows. Consequently, some of these houses placed ingenious quarter-round windows in the gable end (fig. 32). In the desire to achieve the complete symmetry of the temple form, a later adaptation was the placement of the main door on the side of the house rather than on the street side, as was the case at 14 Orange Street (c. 1838).

Figure 29. Thomas Macy House, 99 Main Street, an elegant Federal building.

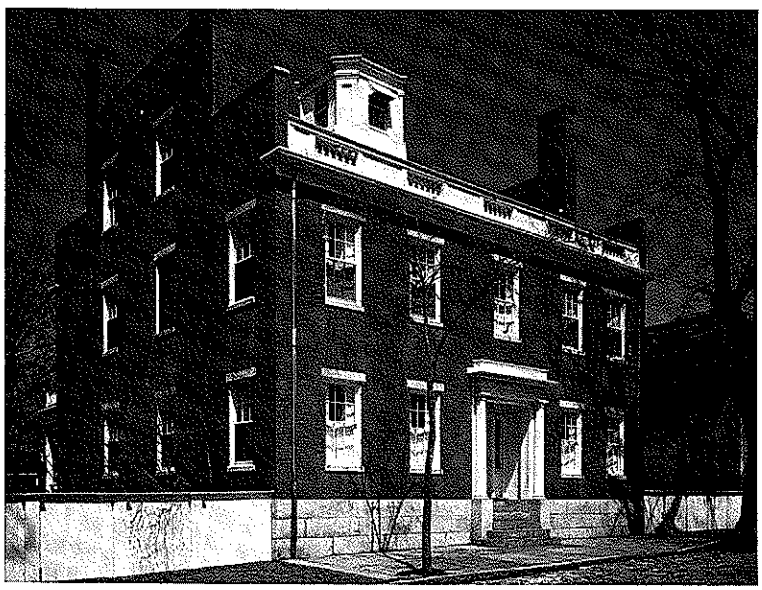


Figure 30. Henry Coffin House, 75 Main Street, an early brick building.

The highest achievements of the Greek Revival style, representative of the wealth and grandeur produced by whaling at its peak, were 94 and 96 Main Street, both built by William Hadwen in the mid-1840s (fig. 33). An imposing pair of elaborate temples, one of Corinthian

Figure 31. 54 Orange Street, a Greek Revival house.

order and the other of Ionic, they are the only residential examples of colossal two-story porticos on Nantucket. Other instances are the Coffin School on Winter Street (1852) and the Atheneum, rebuilt after the 1846 fire. Almost all of the reconstruction after the fire followed the Greek Revival style.

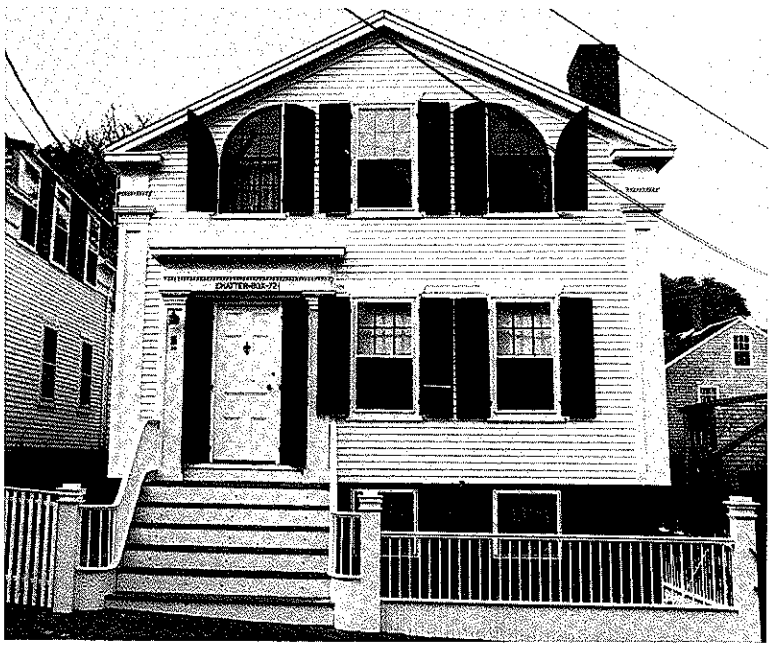


Figure 32. 72 Centre Street, with quarter-round windows in a gable end.

Gothic Revival (1850s) On the mainland Gothic Revival was the leader of the Romantic rebellion against the formality and rigidity of the Greek Revival style. It advocated the adoption of medieval forms, such as steep roofs, pointed and diamond-paned windows and picturesque character rather than the severity of Greek temple forms. In the mid-1850s, as the Gothic Revival began to have some influence on Nantucket, it was abruptly cut short because the demand for new buildings was halted by the island's rapid economic decline. The only major example of the Gothic influence in town is the First Congregational Church (1834) at 62 Centre Street (fig. 34). Other evidence of the style may be seen in the minor pointed windows of fewer than 15 houses, all built primarily in the Greek Revival style.

Victorian Style (1865-1900) After the Civil War, America began a dynamic period of expansion and search for national identity. In architecture it was a time of restless exuberance and experimentation. On the mainland, there was little consensus as to proper architectural style; instead divergent styles were imported from Europe. The harmony of Nantucket's architecture was spared the invasion of these varied and alien buildings by its own economic woes. As the community turned to the summer resort trade, a few of these Victorian houses were built in the town. Perhaps the best known of these is 73 Main Street (1871), built for Eliza Barney, which except for the fanciful ornament of its bracketed Second Empire design, displays qualities of proportion and order common to preceding Nantucket architecture (fig. 35, page 47).

Most of the few post-war houses built within the old town followed the

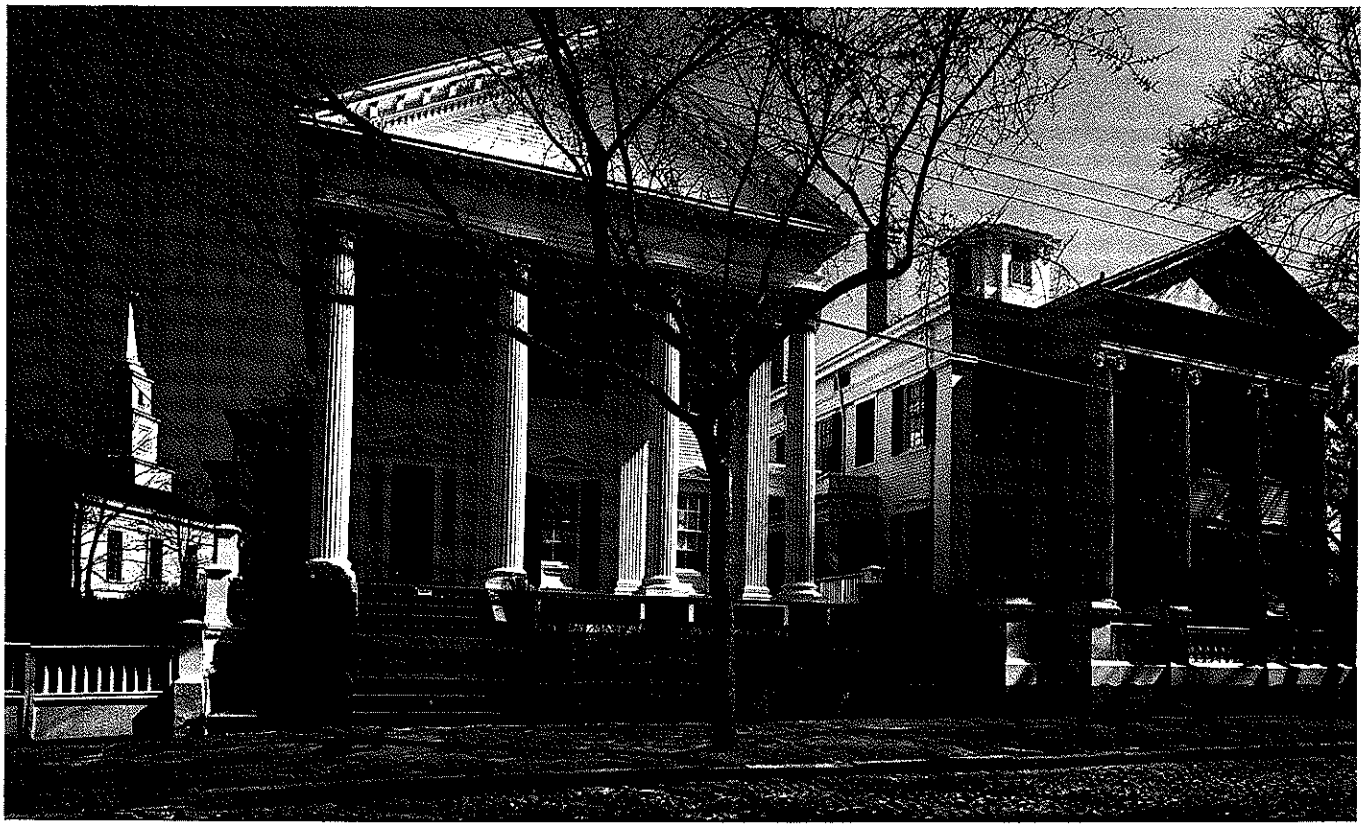


Figure 33. 94-96 Main Street, two imposing Greek Revival residences.

fashion of asymmetrical plans and massing and included details derived from Italian Renaissance farmhouses, such as horizontal cornices supported by curved brackets, arched windows and bay windows. Other features came from the influence of the French Second Empire, especially the mansard roof which was double-pitched with dormers. Fancy ornamentation was typical on these and related styles.

Although few new buildings were built in Victorian styles, a few examples of Victorian vernacular, or farmhouse, architecture (fig. 36) were constructed. Victorian decorative details were adapted to simple house forms, often front-gabled, two-story houses with symmetrical facades. Used most commonly along the cornice line and to accent porches, these features included turned spindle porch columns, lacelike spandrels, balusters in porch railings and decorative friezes running along the tops of porches.

The major Victorian influence on Nantucket architecture was the attachment of decorative elements to the simple masses of older houses, such as door hoods, bay windows, dormers and ornately carved trim boards, in addition to the use of bold Victorian color schemes and a change of window sash to few lights, typically 2/2. This upgrading of the fashion of building by altering its smaller features was in the tradition of island architecture. It sometimes resulted in the accumulation of divergent elements from different styles in one building, revealing the stages of its life. Since organized efforts to preserve Nantucket's historic architecture began in the 20th century, most of these added vestiges of Victorian architecture have been removed, returning houses to their original forms. Remnants still existing today are important indicators of a non-indigenous phase of Nantucket architecture.

Stick Style (1870-1880) The Stick style, a forerunner and contemporary of the Queen Anne style, developed from the Swiss Chalet and the Gothic Revival styles into a free expression of the wooden frame's structural members. It was characterized by sometimes steep and generally overhanging roofs, often with ornate bargeboards, the subdivision of exterior wall surfaces by horizontal and vertical linear stripping within which panels and windows were set, a strong emphasis on the vertical and the deep voids of large porches and verandas with posts and braces. The intent was a picturesque design fitting for a rural American setting. Houses of Stick style details and design were built above and below the Nantucket cliffs and in Siasconset (fig. 37).

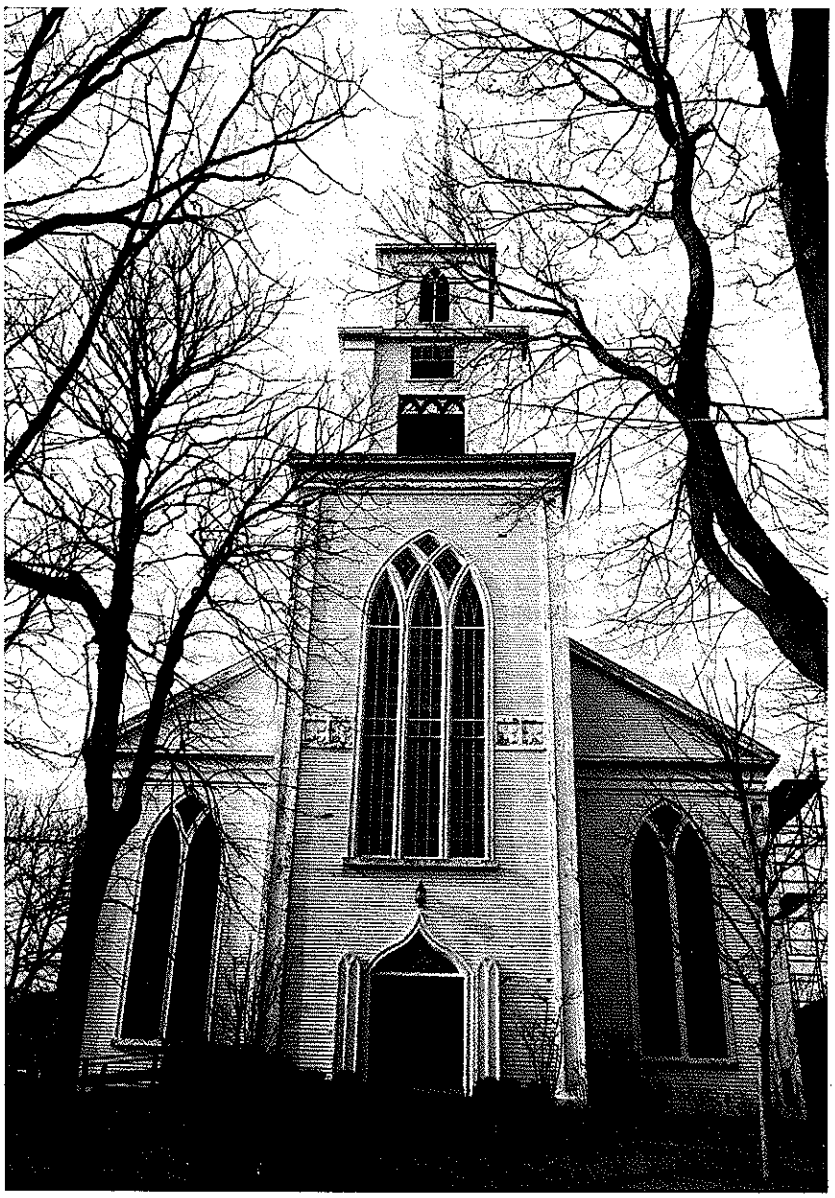


Figure 34. First Congregational Church, 62 Centre Street, a Gothic Revival structure.

Queen Anne (1875-1910) At the same time that new summer houses were first being built on the outskirts of Nantucket, the Queen Anne style assumed the height of national popularity. Inspired by English cottages, the style combined both classical and medieval features, according to functional needs, into a picturesque whole. Irregularly outlined roofs of intersecting gables, dormers and chimneys above freely planned interiors gave each design a completely individual identity. Characteristic details included the use of different textures or materials on the same wall, cut-away corners and window bays. A Queen Anne house is found at 74 Main Street, but the style's premier representatives were built in the newer areas of the town developed in the late 1800s, particularly along Cliff Road, including the early part of the huge, rambling Sea Cliff Inn built on the Nantucket Cliff in 1886 and razed in 1972 (fig. 38).

Colonial Revival (1876-1920) Traditionally dated to 1876, the American centennial, the Colonial Revival movement celebrated the country's anniversary by combining popular architectural styles from its past into a new style of building. Drawing from Federal and Greek Revival styles as well as Colonial, Colonial Revival architecture is an amalgam of these periods, often on an imposing scale. Believed to be a reaction to the grandiosity of the Queen Anne style as well as an outlet for renewed patriotic fervor and

reverence for the nation's past, this style combined such unlikely elements as Palladian windows and ells modeled on earlier house forms. Distinguishing features include an accented doorway, often with pilasters and pediment to make a small sheltered entry porch, and windows in adjacent pairs.

Most elements of this style can be seen around entrances, windows and cornices. They include: five bays, 6-over-6, 8-over-12 or 12-over-12 windows, balusters over porches, end chimneys and corner pilasters (Federal); and classical columns, decorated cornices or entablatures, gabled porticos, round, oval or oculus windows (Greek Revival).

On Nantucket, Colonial Revival architecture appeared just before the turn of the century and continued into the late 1920s, symbolizing the island's resurgence as a prosperous and revitalized town. More grand than the concurrent Shingle style (as it occurred on Nantucket), which produced houses often equally large but always more demure, Colonial Revival architecture sprang up in and around the old town, with Monomoy boasting the only 'cluster' of this style. Among the first homes to be built on this exclusive peninsula, just to the east of town but far enough away to require a horse-drawn surrey ride to Main Street, were three in the Colonial Revival style. Domineering in their day with their massive, two-story facades rising above the treeless terrain, they continue to stand out today, although the area has been widely developed in recent years.

Formidable still for its location at the principal bend in the Monomoy Road, the first features a reproduction Federal doorway, two chimneys (originally at either end) and 6-over-6 windows. Even the garage is faithful to the

Figure 35. 73 Main Street, a Second Empire style house.

Figure 36. A Victorian vernacular style house at the corner of Lyon and Fair Streets.

Figure 37. A Stick style house, North Bluff, Siasconset.

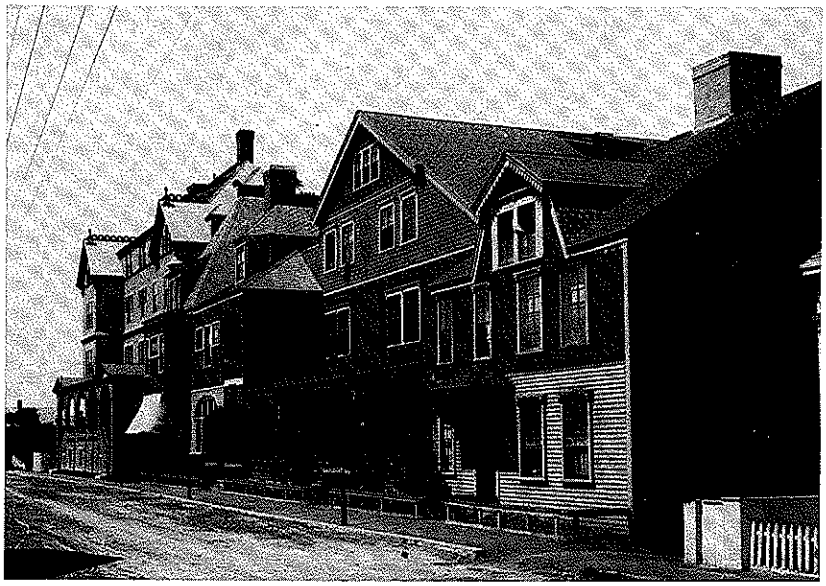


Figure 38. The Sea Cliff Inn (torn down in 1972) along Cliff Road — Queen Anne style, built in 1874.

style, with a saltbox configuration, colonial doors, fanlights and columns incorporated in the breezeway. Two others, one a five-bay, Federal reproduction and one dubbed "Amanda", also grace Monomoy. The latter has a pedimented portico with Ionic columns and the former, 6-over-6 windows with transom lights at the doorway. Both have seen additions, with those added to "Amanda" more sympathetically rendered.

In Monomoy, as elsewhere, the style

Figure 39. "Innishail", 11 Cliff Road, Colonial Revival style on Nantucket.

represented the return of wealth to the island following the lean post-whaling era years and the advent of its first resort boom. After nearly a quarter of a century, during which time the island was a virtual ghost town, the pristine quality of the town of Nantucket had effectively been frozen in time, its architecture preserved by a kind of benevolent neglect. As the island was rediscovered as a spa and an elite summer vacation place, not only was there new money to pour into grand summer homes, there was an enlightened sensitivity to the historic value of the old town and a consequent desire to build within that context.

Perhaps the best single example of Colonial Revival architecture on Nantucket is to be found at 11 Cliff Road (fig. 39). Built in 1895, this great house, called "Innishail", with its large massing, gambrel roof, huge chimneys, portico with balustrade and columns, second floor windows with broken gooseneck pediments and third floor gabled and pedimented dormers, is a monument to the style in its highest form. As with other examples of the style, it was constructed in what was then, and is still considered to be, one of the island's more fashionable locations. Further out Cliff Road, the Westmoor Inn is another imposing example of the style. Others were built on Main Street (#123), Hulbert Avenue (#69), and North Liberty Street (#13 and #37). Number 30 Orange Street, originally late Federal style, was moved and extensively altered in the Colonial Revival style in 1902.

Shingle Style (1880-1895) The Shingle style synthesized the Stick Style, Queen Anne and colonial influences. A true descendant of historic Nantucket houses, it is immediately characterized by the continuous uni-

form skin of shingles that wraps the overall, often picturesque, massing. Other essential qualities are an openness and flow of space through the interior, the generally horizontal form, voids of verandas and porches integrated into the massing and the use of small-scale materials and woodwork in the adoption of vernacular conventions. The result was a large but unpretentious structure at home in the landscape.

Figure 40. A Shingle style house, Atlantic Avenue, Siasconset.

Because it met the needs for relaxed summer indoor and outdoor living and an orientation to water or view, Shingle style houses became popular on Nantucket in the late 1800s. They were erected along the bluffs in Siasconset (fig. 40), on the Nantucket cliffs and along Easton Street and Hulbert Avenue adjacent to the old town (fig. 41). As a major source of suitable new forms for sizable resort houses and hotels on large lots, and as a derivative of early Nantucket indigenous buildings, the Shingle style became an integral part of the architectural development of the island.

Craftsman, Bungalow Style (1900-1940) The Craftsman style is an umbrella term covering the combined influences of Bungalow, Prairie and Arts and Crafts styles. Prairie style building, per se, is not to be found on Nantucket, but elements of this style are. Heralding from Chicago in the first two decades of the 20th century, Prairie architecture is most associated with Frank Lloyd Wright, his early work reflecting it most faithfully. Although a style confined principally to the Midwest, design features which carried over into bungalow and Craftsman style building, and hence to Nantucket, include low-pitched roofs, exaggerated roof overhangs, and porches, often with massive, square supports.

Bungalows traditionally were low one- to $1\frac{1}{2}$ story dwellings, modest in design, with a horizontal emphasis, gently pitched roofs and incorporated front porches (fig. 42), features that carried over into Craftsman style building. Perhaps its most endearing feature and enduring contribution to island architecture is the coziness of its porch, which both integrates interior

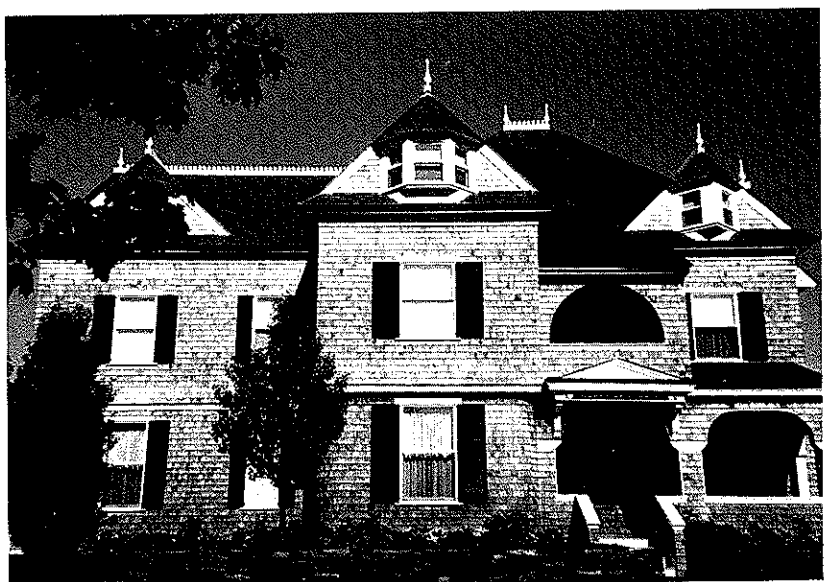


Figure 41. A true restoration of an in-town Shingle style house.

Figure 42. 8 Walsh Street, one of a cluster of bungalow style houses off Easton Street.

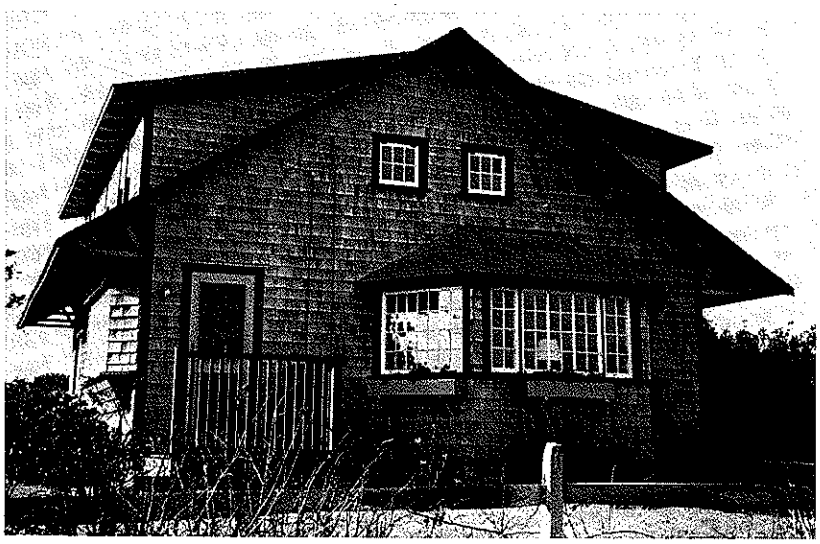
and exterior space and at the same time hints to the passer-by of the charming intimacy that lies within.

The Arts and Crafts style, a movement in England in the late 1800s, for its part, contributed a taste for Oriental woodworking, particularly evident in some of the roof peaks and elaborate dormers found on some Craftsman dwellings.

Craftsman style architecture prided itself in a return to fine craftsmanship in the design and execution of home building. Introduced in this country in California in the early years of the century, the style parlayed training from the manual arts into a kind of house building that became the most popular in America. Drawing from these other styles and the Arts and Crafts movement, they created what has been called "the ultimate bungalow". Although intended to have the charm and distinction of the hand-rendered, the style's great popularity became self-defeating. Craftsman designs found their way into 'pattern' books, eventually replacing the handcrafted concept with mass production.

This style on Nantucket features modestly pitched roofs, usually gabled or hipped, with front porches tucked neatly underneath. Overhanging eaves, exposed beam ends and rafters, false (decorative) brackets and, often, gabled dormers complete the picture. For the first time on the island, windows featured multiple-paned sashes over one large pane -- in other words, the forerunner of the modern picture window.

Low, unpretentious and ideally suited to the concept of vacation getaway cottage, a handful of Craftsman style houses sprang up across the town, at 48 West Chester (notable for its stucco exterior, a rarity on Nantucket, and Prairie-style massive porch columns) and at 20 Milk and 28 North Liberty Streets as well as on Hinckley Lane off Cliff Road (fig. 43) and as far from town as Surfside.



Figuree 43. A Craftsman style house at 2 Hinckley Lane.

The design of new buildings in the 2Oth century has not been characterized by a consensus on the most appropriate successor style to be followed. The first part of the century exhibited, in addition to the awakening interest in restoration of the old houses, an eclectic approach to design that borrowed and combined design forms and elements from many past styles. The in-

fluence of consistent materials and conventions most suited to the environment has related the variety of building strains. Many of the more recent 'modern' buildings, with their opposition to superfluous ornament, have shown an affinity with the earlier island structures.

Essential Concepts of Architectural Design

In considering the guidelines for construction and alterations on Nantucket, it is important to understand essential architectural design concepts that apply to broad town patterns as well as to individual features of a building's design. These basic concepts are scale, proportion, balance, rhythm and order.

Scale Scale is a measure of the relative or apparent size of a building or any architectural element in relation to a known unit of measure, usually the dimensions of the human body (fig. 44). The primary dimensions of a building, such as the size of the exterior wall

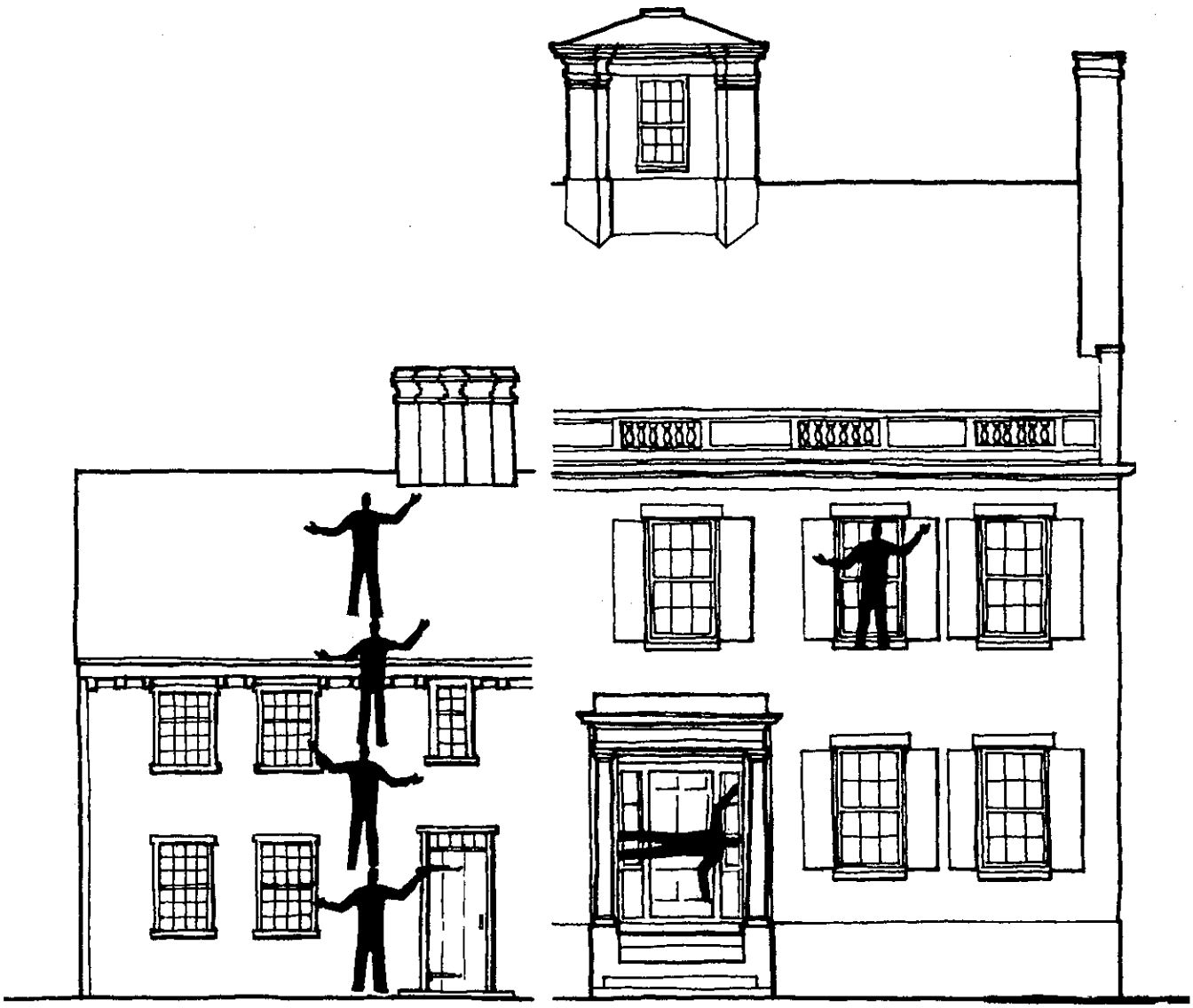


Figure 44. Building scale relates to the dimensions of the human body.

Figure 45. 29 and 14 Orange Street — two buildings of similar size but different scale.

planes and window openings, establish its underlying scale. But the scale of a building is created by the combined effect of all visible dimensions of its design, including units of surface material, applied elements, window lights and trim. To be of a human scale, a building must have a predominance of dimensional units within a wall plane that does not exceed the length of the human body. On the other hand, a monumental scale is made of much larger dimensioned elements and is, therefore, imposing.

Two buildings of the same overall size may have different scales because of the sizes of elements in the facade. This is shown by a comparison of 29 Orange Street with 14 Orange Street, a Greek Revival structure (fig. 45). In the same way, a building mass can be made to appear larger or smaller by manipulating the size of its elements, such as windows or trim.

The scale of a building is one of the most important factors determining whether it is compatible with its setting. A stark contrast of scale between adjacent buildings is visually disruptive while a similarity of scale gives them a fundamental relatedness. The unified charm of the streets of Nan-

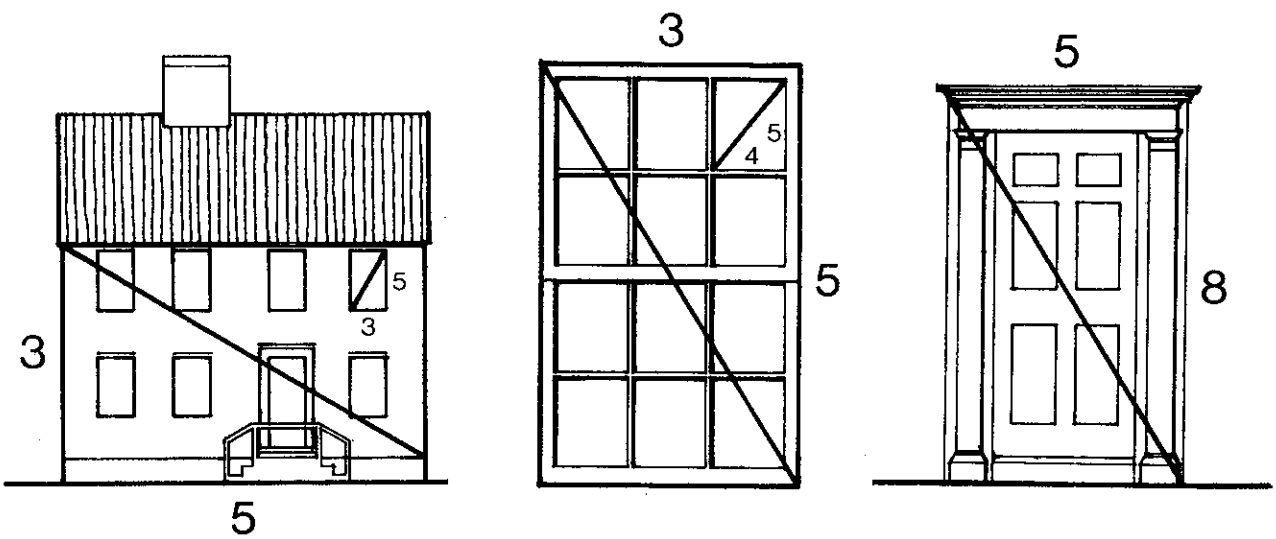


Figure 46. Proportions are ratios of dimensions, height to width.

tucket is due largely to the consistent scale of its buildings.

Scale not only applies to the dimensions of a building but to space as well. Between buildings or other visual solids, such as trees, are the voids of partially enclosed spaces. Their scale is measured relative to the size of a human and is affected by the building walls about it. In the town a difference in scale of the street spaces can be noticed between Main Street and narrower Liberty Street.

Open landscapes have a sense of scale created by the shape of the ground, the size or distance between geologic features, dimensional units of vegetation and other visible objects. Depending on its own scale, a building can either accentuate or negate the scale of the natural setting. Because buildings in an open area are often seen from afar, their bulk and massing (meaning roughly size and shape) are the primary features determining their scale. The height of a building is an especially critical dimension in the landscape. However, it should be recognized that two buildings of the same overall height, because of their other dimensions, can be of different scales and, therefore, of different visual impacts.

Proportion Proportion is the relation of one portion (dimension) to another and usually is described as a numerical ratio. On a building, it can refer to the width-to-height ratio of a whole wall plane or the smaller elements within the wall such as windows, doors, other wall openings and the area between them (fig. 46). Proportions, of course, involve many other and smaller relationships. The overall object of proportional considerations in architecture is the creation of visual order through the coordination or repetition of the shapes in a design. Visual chaos will result if too many parts are of different or unrelated shapes.

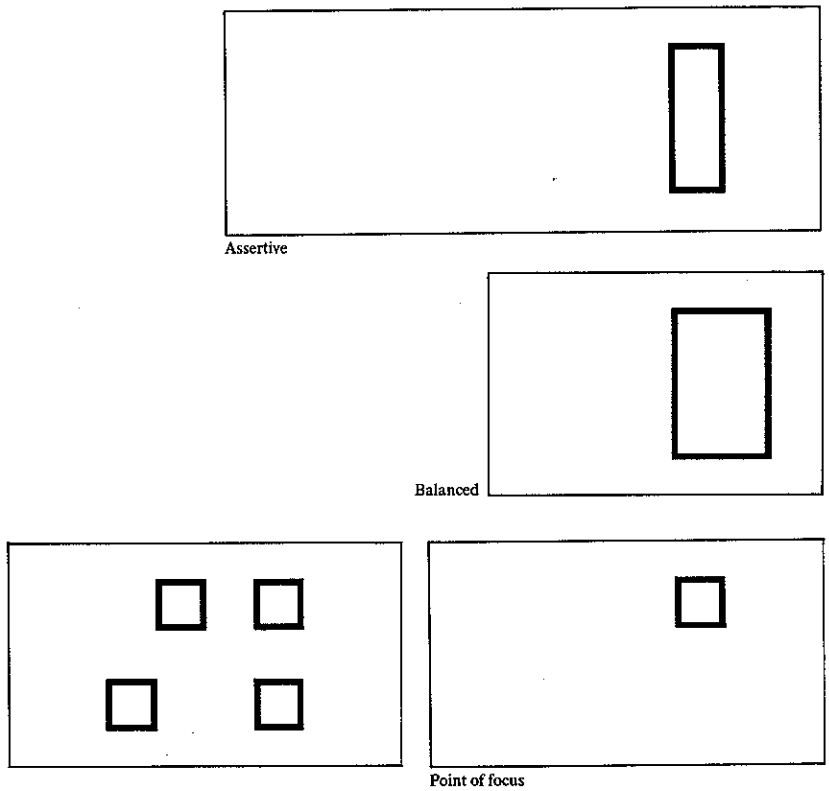


Figure 47. A square shape demands attention and creates a point of focus. Rectangles may have restful or assertive proportions.

Different ratios of length to width, i.e.. shapes of an architectural feature, have different visual effects. A square-shaped area of roughly equal-length sides is internally balanced and will attract the eye to its center. Two or more disconnected square shapes in a visual field, i.e., a building wall, will compete visually with each other. A rectangular shape has a visual emphasis in the direction of its longer side. The greater the proportion or difference in length of the two sides, the stronger or more assertive this emphasis. The most restful rectangular shape falls between these: It creates neither a strong focus nor a strong directional emphasis. A shape having the proportions of approximately 1:1.5 (2:3) has these qualities (fig. 47).

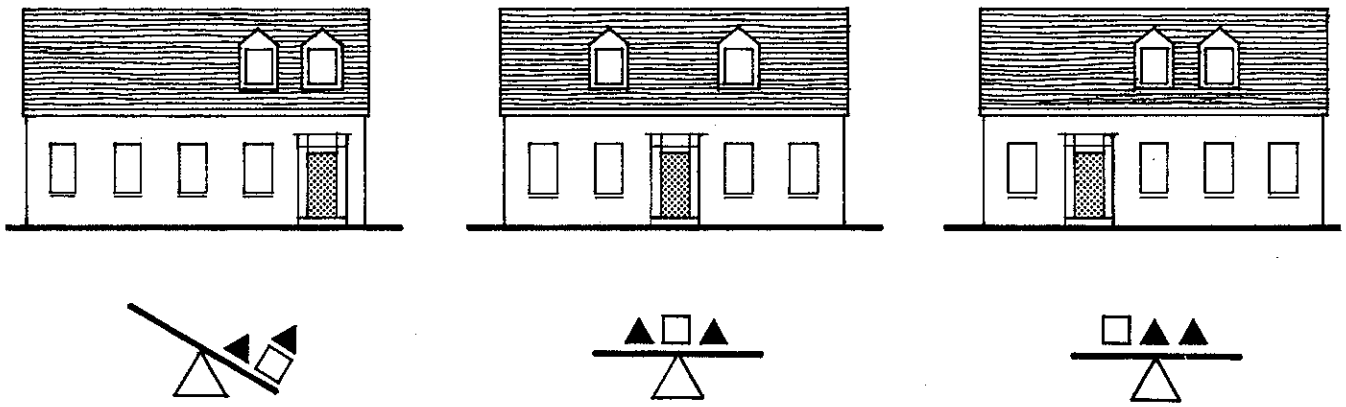


Figure 48. Visual balance involves the visual weights of design elements.

The use of proportions on Nantucket buildings in the past has seldom been strict because most buildings were constructed without formal designs or drawings. However, the general proportions of their designs are concordant and pleasing because of the use of consistent and limited building traditions and materials which resulted in a high degree of refinement over the years.

Where buildings are aligned and seen together, the relationship between their proportions is important. Along a street, an agreement as to proportions brings unity and harmony to the streetscape. This is most important when building walls are simple planes and close to one another. A consistency of the directional emphasis of the facades along a street created by their proportions is particularly beneficial, as is seen in the street elevations of India Street (see pages 24-25).

Balance The principles of visual balance are analogous to those of physical balance. Elements of a building's design can be said to have visual weights that balance around a visual axis, i.e., a fulcrum. An imbalance in a building design is created when the visual axis established by the plain masses or volumes alone conflicts with another visual axis formed by major elements of the design, such as entrances. Simple illustrations of facade balance can be seen in the diagrams representing the weight of the main entrance as a white square and the two dormers as black triangles (fig. 48).

Symmetry (bilateral) is a simple static

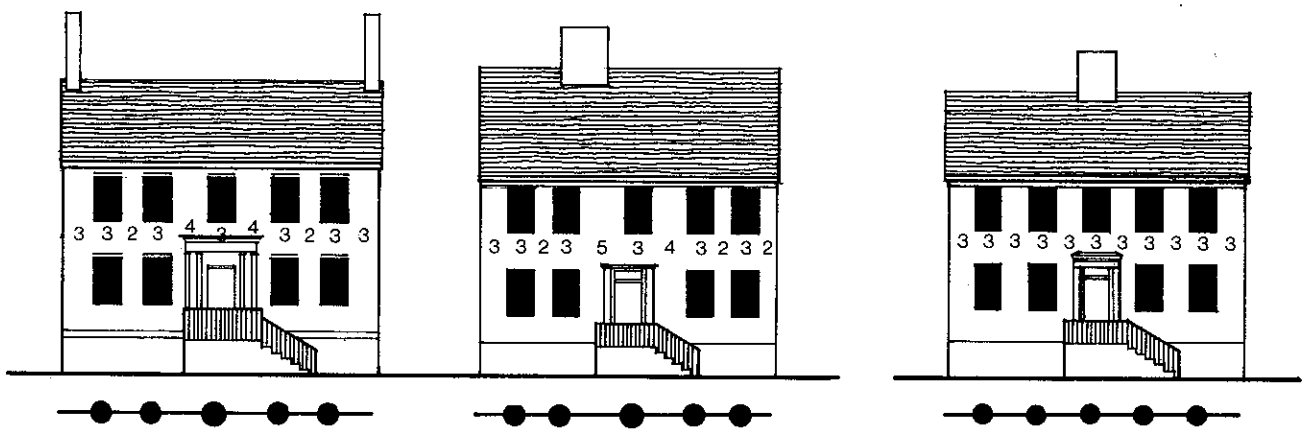


Figure 49. Rhythm of design elements creates interest on a facade or along a street.

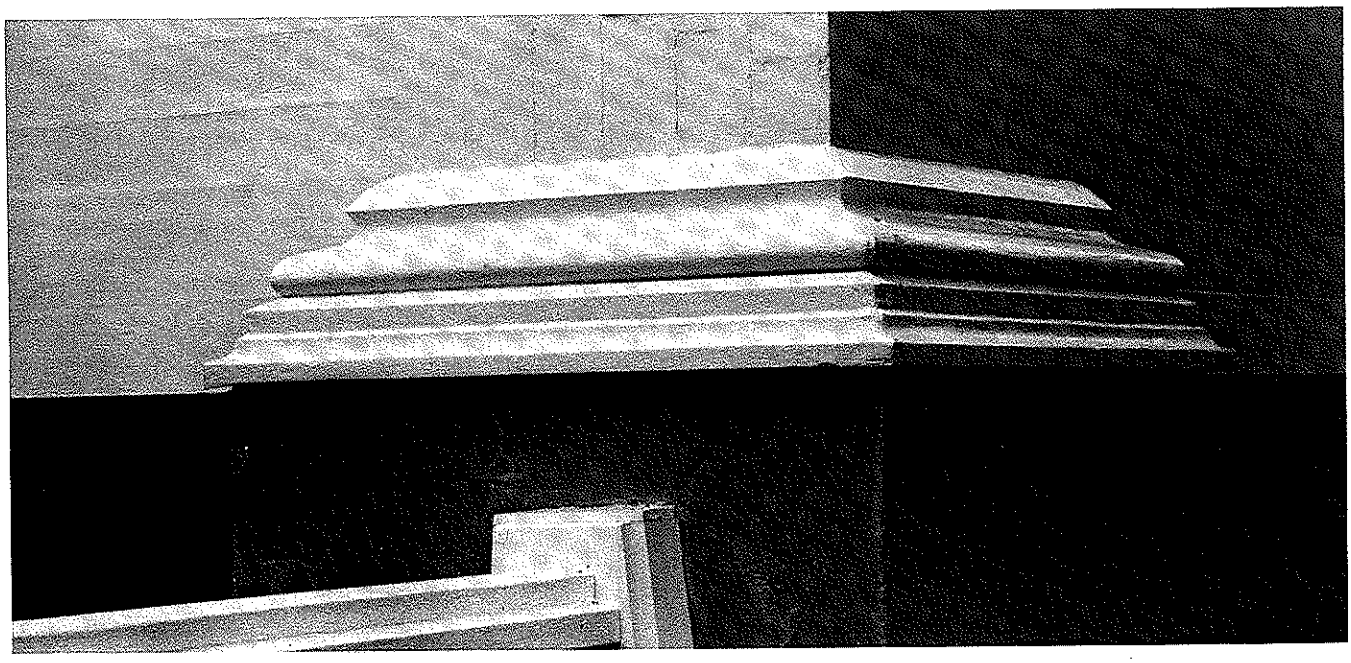
balance in which one side is the identical reverse of the other. It was not prevalent on the island until after the late 1700s. A dynamic balance is more complex, involving a careful arrangement of non-identical or unpaired parts. In town, the formality, and sometimes monumentality, of symmetry can be used appropriately, but on a large building in a natural setting a non-symmetrical balance of differing parts or picturesque character is more akin to its surroundings.

Rhythm Architecture has been called 'frozen music' and the principle of rhythm is an invaluable component of it. Rhythm in buildings is a visual movement characterized by regular recurrence of elements alternating with opposite or different elements. On a simple Nantucket house the primary rhythm is in the fenestration, the alternation of windows and wall areas, i.e., solids and voids (fig. 49). A good rhythm has variations that create interest, while a 1:1:1 rhythm is most often monotonous.

In any grouping of buildings, especially when aligned, rhythms among them can tie them visually into a unified composition. These rhythms may be composed of their masses, gables, spaces between them, their windows, entranceways or other elements. The street elevations of India Street show the strong rhythms among its buildings (see pages 56-57).

Order Architectural order is an understandable visual relationship between the parts of a building and how they combine to form a united whole. Order is necessary to eliminate visual competition and to prevent ambiguities in the roles and relative importance of the various elements. Order can be created by skillful variation of architectural emphasis and size of elements as well as by coordination of their proportions, rhythms and balance.

In addition to the principles defined here, a comprehensive glossary of architectural terms can be found in Appendix E.



Column base—Atheneum.

Liberty Street.

No. 35 George Lawrence (Snow House)

No. 33 John Russell Home (Maj. Brock House)

No. 31 Eliab Hussey House (Dunham)